The following listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method for determining whether a molecule affects the function or activity of a sterol biosynthesis pathway in a S. cerevisiae cell comprising:

(a) contacting said cell with, or recombinantly expressing within said cell, said molecule; and

(b) determining the amount of RNA expression or protein expression of a target polynucleotide sequence in said cell, said target polynucleotide being a sequence operatively linked to a promoter native to S. cerevisiae gene YMR325W~~, or a YMR325W promoter sequence homolog comprising one or more nucleotide substitutions, additions or deletions that does not effect the ability of the sequence to promote transcription of said operatively linked sequence in substantially the same manner as native YMR325W that does not comprise said one or more nucleotide substitutions, additions or deletions~~;

wherein an altered level of RNA expression or protein expression of said polynucleotide in said cell contacted with said molecule as compared to a cell not contacted with said molecule indicates that said molecule does affect the function or activity of said sterol biosynthesis pathway.

2. (previously amended) The method of claim 1, wherein said target polynucleotide sequence comprises a marker gene.

3. (previously amended) The method of claim 1, wherein said altered level of RNA expression or protein expression of said polynucleotide in said cell contacted with said molecule is deceased as compared to a cell not contacted with said molecule.

4. (cancelled)

5. (previously amended) The method of claim 1, wherein RNA expression of said polynucleotide is changed in said cell contacted with said molecule as compared to a cell not contacted with said molecule.

6. (previously amended) The method of claim 1, wherein protein expression of said polynucleotide is changed in said cell contacted with said molecule as compared to a cell not contacted with said molecule.

7. (previously amended) The method of claim 1 wherein said altered level of RNA expression or protein expression of said polynucleotide in said cell contacted with said molecule is increased as compared to a cell not contacted with said molecule.

8. (original) The method of claim 1, wherein the S. cerevisiae cell is a cell that recombinantly expresses said target polynucleotide sequence.

9. (previously amended) The method of claim 1, wherein said contacting is carried out in a liquid high throughput-like assay.

10. (previously amended) The method of claim 1, wherein said contacting is carried out in a solid plate halo assay.

11. (previously amended) The method of claim 1, wherein said contacting is carried out in an agar overlay assay.

12. (canceled)

13. (currently amended) A method for monitoring activity of a sterol biosynthesis pathway in a S. Cerevisiae cell exposed to a molecule comprising:

(a) contacting said cell with, or recombinantly expressing within said cell, said molecule; and

(b) determining the amount of RNA expression or protein expression of a target polynucleotide sequence in said cell, said target polynucleotide sequence being regulated by a promoter native to a S. cerevisiae YMR325W gene o~~r a YMR325W promoter sequence homolog comprising one or more nucleotide substitutions, additions or deletions that does not effect the ability of the sequence to promote regulated transcription of said target polynucleotide sequence in substantially the same manner as native YMR325W that does not comprise said one or more nucleotide substitutions, additions or deletions~~;

wherein an altered level of RNA expression or protein expression of said polynucleotide in said cell contacted with said molecule as compared to a cell not contacted with said molecule indicates that said function or activity of said sterol biosynthesis pathway is altered.

14. (canceled)

15. (previously amended) The method of claim 13, wherein said cell is contacted with said molecule.

16. (canceled)

17. (previously amended) The method of claim 13, wherein said molecule is recombinantly expressed in said cell.

18. (canceled)

19. (previously amended) The method of claim 13, wherein said altered level of RNA expression or protein expression of said polynucleotide in said cell contacted with said molecule is increased as compared to a cell not contacted with said molecule indicates that the activity of said sterol biosynthesis pathway is inhibited.

20. (previously amended) The method of any of claims 13, 15, 17, or 19, wherein said target polynucleotide sequence comprises S. cerevisiae YMR325W.

21. (currently amended) A method for identifying a molecule that modulates expression of a sterol biosynthesis pathway target polynucleotide sequence comprising:

(a) recombinantly expressing in a S. cerevisiae cell, or contacting a S. cerevisiae cell with, at least one candidate molecule; and

(b) measuring RNA or protein expression of a target polynucleotide sequence in said cell, said target polynucleotide sequence being regulated by a promoter native to a S. cerevisiae YMR325W gene ~~or a YMR325W promoter sequence homolog comprising one or more nucleotide substitutions, additions or deletions that does not effect the ability of the sequence to promote regulated transcription of said target polynucleotide sequence in substantially the same manner as native YMR325W that does not comprise said one or more nucleotide substitutions, additions or deletions~~;

wherein an increase or decrease in expression of said target polynucleotide sequence relative to expression of said target polynucleotide sequence in the absence of said candidate

molecule indicates that said candidate molecule modulates expression of said sterol biosynthesis pathway target polynucleotide sequence.

22. (currently amended) The method of claim 1 wherein said promoter comprises SEQ ID NO: 3 ~~or a SEQ ID NO: 3 homolog comprising one or more nucleotide substitutions, additions or deletions that do not effect the ability of the sequence to promote transcription of said operatively linked sequence~~.

23. (original) The method of claim 2 wherein said marker gene is selected from the group consisting of green fluorescent protein, red fluorescent protein, blue fluorescent protein, luciferase, LEU2, LYS2, ADE2, TRP1, CAN1, CYH2, GUS, CUP1 and chloramphenicol acetyl transferase.

24. (canceled)

25. (original) The method of claim 1, wherein said molecule is selected from the group consisting of natural products, proteins, and small molecules.

26. (original) The method of claim 25, wherein said molecule is purified.

27. (original) The method of claim 25, wherein said molecule is not substantially purified.

28. (previously amended) The method of claim 1, wherein said contacting comprises incubating said cell with a second cell that produces said molecule.

29. (previously amended) The method of claim 28, wherein said molecule is released by said second cell.

30. (previously amended) The method of claim 28, wherein said molecule is secreted by said second cell.